NATIONAL WEATHER SERVICE

Western Region Notes

NOVEMBER 18, 2004

AROUND THE REGION

Students in the EYH program make tornados in a bottle.

Expanding Your Horizons Outreach: On November 6, Andrea Bair (Climate Program Manager, WRH) and Shelley Heaps (Equal Employment Manager, WRH) participated in an Expanding Your Horizons (EYH) program in Science and Mathematics. The program was held at Mt. Ogden Middle School in Ogden, Utah.

The objective of the EYH program is to help girls become more interested in science and math by showing them that there are many women working in career fields requiring education in science and math and that these careers are attainable.

Approximately 460 girls in grades 6-9 from parts of Southern Idaho, Northeastern Nevada, and Northern Utah attended the EYH program. Professional women working in various scientific and technology fields conducted 1-hour workshops with hands-on demonstrations. Andrea and Shelley conducted a workshop on the National Weather Service's (NWS) mission and discussed various forms of weather and its impact on the nation.

ET Bryan Tilly waves the #1 for his winning Roman Elk Stew.

A Super Soup Survey: Regrouping after a long summer and fall, WFO Pocatello hosted a "Super Soup" cook-off contest just in time for Halloween. Staff members made their special concoctions using ingredients from the local area. Staff and spouses judged the warm brews in the following categories: Color, Taste/Flavor, Texture, Aroma/Smell, and Impression. Winners included:
Most colorful: Chicken Sink (by SH Sherrie Hebert)
Aroma/Smell: Cheese Spook (by ASA Donna Mills)
Taste/Flavor / Texture / Impression: Roman Elk Stew (by ET Bryan Tilly). Other participants included Forecaster Ken Simosko with "Peg's Poultry Potage" and WCM Vernon Preston with "Bisque d'la Corps of Discover." The overall winner, using local Idaho-grown Elk, was Bryan Tilly who received a 76.1 rating.

METEOROLOGICAL SERVICES DIVISION

Statement of the Week: This week's Statement of the Week is a Marine Weather Statement issued by WFO Eureka. The statement highlighted hazardous seas with large swell (14-16 feet) beginning on Saturday morning, November 13. The swell did increase to 15 feet over the Coastal Waters. WFO Eureka provided about 24 hours lead time for the event, and the hazardous conditions persisted until Sunday morning, November 14.

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MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE EUREKA CA
145 PM PST FRI NOV 12 2004

...LARGE SWELL EXPECTED IN THE COASTAL WATERS FROM 9 AM SAT THROUGH 9 AM SUNDAY...

A POWERFUL STORM IN THE GULF OF AK IS CURRENTLY GENERATING LARGE SWELL. SWELL HEIGHTS THROUGHOUT THE COASTAL WATERS ARE EXPECTED TO RISE RAPIDLY FROM 4 TO 6 FEET TONIGHT...TO BETWEEN 14 TO 16 FEET LATE SATURDAY MORNING. THIS SWELL IS EXPECTED TO HAVE A PERIOD OF 15 TO 17 SECONDS. SEAS ARE EXPECTED TO BE PARTICULARLY HAZARDOUS OVER THE SOUTHERN WATERS...WHERE WINDS WILL BE GUSTING TO 25 KT AT TIMES ON SATURDAY. BECAUSE THE WEATHER RESPONSIBLE FOR THIS SWELL IS ONGOING AND RAPIDLY CHANGING...MARINERS SHOULD REMAIN ALERT FOR POTENTIAL CHANGES TO THE MARINE FORECAST.

STAY TUNED TO NOAA WEATHER RADIO AND OTHER LOCAL MEDIA FOR FURTHER DETAILS OR UPDATES.
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(L to R) Pete Fickensher, CNRFC and Johnnie Powell, WFO Sacramento, participate in the Internship and Career Fair.

University of California at Davis Career Fair: Staff from WFO Sacramento, the California-Nevada RFC, and Western Region Headquarters spent three days at the University of California at Davis talking with students and university staff about hydrometeorology and careers in the Department of Commerce. Highlights included meeting with 60 students from the Multiculturalism in Agriculture, Natural Resources, and Related Sciences Club; speaking to about 90 students interested in careers with the DOC at the UC Davis Environmental Internship and Career Fair; and

presenting a hands-on class in Doppler radar to 12 Davis students from a weather instrumentation course.

Ted Buehner (WCM, WFO Seattle) addresses broadcaster class.

Seattle WCM is Guest Instructor at Radio Broadcaster School: On November 3, Seattle's WCM, Ted Buehner, was a guest instructor at a radio broadcaster class at Evergreen State College in Olympia, Washington. The class consisted of ten students and addressed various topics, including the NWS mission, operations, forecasts and warnings, terminology, the National Digital Forecast Database, methods to obtain NWS products and services, and how the NWS integrates with the Emergency Alert System (EAS). The students also had the opportunity to observe a routine NWS "Weekly Test" of the EAS.

WFO Seattle Hosts Winter Weather Press Conference; Seattle and Metro Area Counties Also Recognized as StormReady: On November 10, WFO Seattle hosted the 9th annual Puget Sound region "Taking Winter By Storm" press conference. The city of Seattle, along with King, Pierce and Snohomish counties, use this press conference to highlight the preparedness efforts and communication tools for the upcoming winter season.

This year, Seattle and the three counties were recognized as StormReady communities. County executives, the Seattle Mayor's office, and emergency management directors received StormReady recognition letters, certificates, and StormReady signs. Seattle area TV and radio stations and newspapers carried stories highlighting their new StormReady communities. Seattle and the three counties together comprise the largest metro area in the country yet to receive StormReady recognition.

John Livingston and Charles Ross staff the NWS booth at the 2004 Spokane Snow Show.

WFO Spokane Participates in Spokane Area Snow Show: WFO Spokane hosted a booth at the 2004 Spokane Area Snow Show at the convention center in downtown Spokane. Staff members John Livingston, Charles Ross, and Robin Fox worked the one day event meant to get folks prepared for the winter sports season. Event attendance was around 3500, and many attendees stopped by the NWS booth to enquire about El Nino conditions and the long term forecast. Items drawing the most attention were the NOAA cloud charts, WFO Spokane pencils with the new web address on them, and the NOAA/Red Cross winter preparedness brochure. This set of customers is a big user of our web site

and many favorable comments were received on the accuracy of the forecasts and the easy access to a wealth of useful information. There were even some costumers from north of the border who said they depend on our web site to get the latest warnings and forecasts.

Santa Cruz County Earns StormReady Certification: On Wednesday, November 10, WFO Monterey conducted a StormReady ceremony for Santa Cruz County, California. The ceremony was held at the Santa Cruz County Health Services Administration Building. Santa Cruz is one of only a few counties in the state to have achieved this high recognition. Local media (KSBW - NBC8 from Salinas) recorded the ceremony and also interviewed Mike Dever and Dave Soroka.

WFOs San Diego and Los Angeles Visit Radio Station: Staff members from WFOs San Diego and Los Angeles recently visited KFI radio in Los Angeles. KFI, a Clear Channel station, is the number one rated talk radio station in the country. With all the changes in the Western Region websites, KFI had made several recent inquiries to the San Diego and Los Angeles offices asking where information they got from the old web page would now be located. The offices decided to hold a joint visit to the radio station to demo the new web page and to introduce them to new digital services now available. From the visit, both offices took away several suggestions on how to organize the web page information for use by the Los Angeles radio media. A visit was also paid to KNX in Hollywood, a news station owned and operated by CBS.

HYDROLOGY AND CLIMATE SERVICES DIVISION

Fire Hydrology and Damage Tables: During the week of November 1, Bill Reed, Senior Hydrologist, CBRFC, and Mike Schaffner, Service Hydrologist, WFO Tucson visited several burn sites in Southern Arizona to collect additional field data for a paper they are preparing "The Effects of Wildfire in the Mountainous Terrain of Southeast Arizona: An Empirical Formula to Estimate 5-year Peak Discharge from Small Watersheds." Additionally they meet with County and Town officials in Clifton to discuss proposed changes to the damage table for San Francisco River at Clifton. This meeting was held after evaluating the need for the proposed changes.

Colorado River Stakeholders Water Supply Briefing: NOAA hosted a water supply briefing for interested principal Colorado River stakeholders focusing on seasonal hydroclimatic outlooks for the Water Year 2005 (October 2004-September 2005). The meeting was held in Salt Lake City on November 9, 2004. Stakeholders from Colorado, Utah, Arizona, and California attended the meeting, along with NOAA entities such as CPC, CDC, OGP, OCWWS/CSD, and Western Region NWS offices. Dave Brandon, the HIC at the Colorado Basin River Forecast Center, provided a briefing on the RFC's

Extended Streamflow Prediction process and a water supply forecast for the Colorado Basin for the 2005 Water Year.

Great Falls Hydrologist Participates in Watershed Education Workshop: Great Falls service hydrologist Gina Loss and general forecaster Jason Schaumann recently spent a day by Dupuyer Creek on the Theodore Roosevelt Memorial Ranch near Dupuyer, Montana (the heart of grizzly bear country), participating in a "Sustaining the Source through Watershed Education" workshop. The workshop was the kickoff to a year long EPA-funded project, organized through the Anderson Conservation Education Program of the Boone and Crockett Club and the Elmer Rasmuson Wildlife Conservation Center. During the project, junior high schools in Dupuyer, Browning, and Valier will each explore watershed health issues and conduct three local watershed restoration and/or enhancement projects. Gina and Jason spent the day teaching students how to take weather observations during the project. This included teaching the students about the water cycle, clouds, wind, temperature, dew point, and relative humidity. In addition to weather, the students were given training on plants, macro invertebrates, water chemistry, streamflow, geography, geology, upland/wetland soils, land use practices, and soil chemistry.

SCIENTIFIC SERVICES DIVISION

Advanced Warning Operations Course (AWOC): The Advanced Warning Operations Course (AWOC) was launched in October by the Warning Decision Training Branch (WDTB). AWOC is the next course in the series that begun with the OSF WSR-88D “in residence” warning training of 1991-1997 and the WSR-88D Distance Learning Operations Course (DLOC) offered to new hires after 1997.

The intent of AWOC is to maintain, refresh, and advance the radar and warning skills of all NWS meteorologists, hydrometeorologists, and hydrologists in an effort to meet our NWS GPRA service goals and provide an effective forecast and warning service to all our customers.

AWOC Course Format:
AWOC consists of three training tracks. The first track is known as the “Core Track” and provides training on Situational Awareness, Effective Office Warning Strategies, Data Quality, and Societal Impacts and Perception of weather warnings. The second track is the “Severe Track” and provides the latest information on Convective Storm Conceptual Models, Threat Assessment, Storm Interrogation Strategies, and WES Simulations. The third track is the “Winter Weather Track” which is under development and will be available in FY06.

Who Should Take the Course?

WFOs:

Meteorologists. All operational forecasters who have completed the original 3 ½ week OSF radar course or DLOC are required to take all three tracks (Core, Severe Weather, and Winter Weather).

HMTs. AWOC is optional, but encouraged. All HMTs are encouraged to take the "Core Track" at a minimum. HMTs involved with supporting the warning program, or are thinking about preparing to cross over to the 1340 series, are also encouraged to take the "Severe Weather Track". It is delegated to local management to determine which training tracks the HMTs should complete.

RFCs:
A special "Hydrology Core Track" is being developed and will be available in February 2005. HAS and other hydrologists directly associated with the flood warning program are required to take this "Hydrology Core Track" only. The course is encouraged, but optional for others.

CWSUs:
CWSU meteorologists are required to take the "Core Track". Since CWSU meteorologists should maintain basic radar skills, they are strongly encouraged to take the other two tracks.

New Employees:
Interns and other new employees in the above categories should take the WSR-88D DLOC course first, then AWOC. The AWOC Core and Severe Weather Tracks will be available in FY06 and beyond for attrition training (new intern training).

AWOC Training Deadlines:
AWOC is composed of a set of web-based modules, Teletraining, and a few WES training cases. It is important that offices keep up with the training schedule. In WR, we have broken the two track deadlines up into first and second half of FY05. Completion will be tracked by LMS and reported in the WR Professional Development and Training plan.

- March 31, 2005 -- Complete Core Track (WFO and CWSUs)
- August 31, 2005 -- Complete Severe Weather Track (WFO and CWSUs)
- August 31, 2005 – Complete Hydrology Core Track (RFC's only)
- TBD (probably March, 2006) -- Winter Weather Track (WFO and CWSUs)

Office Focal Points (AWOC Facilitators):
The WDTB put an enormous amount of time and effort into producing AWOC. The WDTB provided AWOC and LMS facilitator training for one focal point (SOO, DOH or radar focal point) at each office. The facilitator plays the key role in helping the office with the completion of the WES cases. Each manager should allow time for the AWOC Focal Point to complete these activities.

For more info on AWOC and LMS go to: http://wdtb.noaa.gov/courses/awoc/index.html.

Renaming of ETA and GFS: NCEP is in the process of renaming the AVN and Eta models to better reflect the functions of the models. The AVN model is being renamed

to the GFS (Global Forecast System), and the Eta to the NAM (North American Mesoscale) model.

The name change is in preparation for the replacement of the Eta Model and its 3DVAR analysis / Eta Data Assimilation System (EDAS) with the Weather Research & Forecasting (WRF) versions: NCEP's Nonhydrostatic Mesoscale Model (NMM) and a new Gridpoint Statistical Interpolation (GSI) analysis. A briefing package can be found at: http://wwwt.emc.ncep.noaa.gov/mmb/mmbpll/wrftest/WRF-HRW-Readiness-Rev-13Sep04_files/v3_document.htm. WRF, in various flavors, will be running in several other slots in the future (Eta, DGEX, RUC, Fire Weather/IMET Support, Homeland Security, Hurricane, SREF & Air Quality).

The renaming process will be complete once NCEP Central Operaitons (NCO) begin operational processing on Phase II of the Central Computing System. The change is scheduled for Tuesday, January 18. No word yet when the change will occur on AWIPS.

Teletraining Session for November and December: The Virtual Institute for Satellite Integration Training (VISIT) and the Integrated Sensor Training Professional Development Series (ISTPDS) sessions for November and December are listed below. Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu.

The teletraining calendar is at: http://www.cira.colostate.edu/ramm/visit/ecal.asp

Note: the teletraining planning calendar with sessions by the Interactive Forecast Preparation System PDS team and Warning Decision Training Branch including AWOC teletraining sessions is at: http://www.cira.colostate.edu/ramm/visit/planning.html

The added sessions for November and December are:
HPC Winter Weather Desk Products/Services 2004-2005
(Basic, Nov 18,22,23,24; Dec 3,6,9,10,13)

Pete Manousos (NCEP/HPC/SOO) has prepared a telebriefing session called "HPC Winter Weather Desk Products/Services 2004-2005". This is a short session on the products and services available at HPC's Winter Weather Desk for the winter of 2004-2005.

The goals of this presentation are:
1. Provide quick overview of HPC's products and services
2. Provide deadlines of activities
3. Highlight changes from Winter Weather Experiment 3

NWS/COMET Outreach Program 2005 Request for Proposals: The Cooperative Program for Operational Meteorology, Education, and Training (COMET) announces its 2005 Outreach Program Request for Proposals (RFP) for Cooperative Projects. More

information about submission requirements can be found online at http://www.comet.ucar.edu/outreach/coop.htm. The first draft of the COMET Cooperative Proposal is due to the appropriate NWS region by January 24, 2005. The final version must be submitted to the COMET Outreach Program by March 14, 2005.

WES TA-Lites: The majority of the summer Weather Event Simulator (WES) TA-Lites has been posted to the Western Region Home page and may be found at: http://www.wrh.noaa.gov under On-Line Publications. You are encouraged to check these out to see what your regional counterparts are choosing for WES training exercises, and if they may be useful in your own office training.

TAs on the Web: The following Technical Attachments are now available on the Web at: http://www.wrh.noaa.gov/wrh/ta.php.

- A Procedure for Forecasting Dry Thunderstorms in the Great Basin using the Dynamic Tropopause and Alternate Tools for Assessing Instability (by Jim Wallman, Reno, NV)

- Estimates of Buoyancy, Shear, and Precipitable Water Thresholds (by Jessica Mendoza, Tucson, AZ)

- The Madden Julian Oscillation: It's Potential for Week Two Flood Outlooks and Reservoir Management Decisions in California (by Dave Reynolds, Monterey, CA)

Major Changes at COMET: COMET has reworked their web site. You can find the new web site at http://meted.ucar.edu/.

A new COMET web module is available on the theory and use of ensemble prediction systems (EPSs): Ensemble Forecasting Explained. This module, a part of our series on Numerical Weather Prediction, will help forecasters develop an understanding of the basis for EPSs, the tools used to interpret their performance and output, and their use in the forecast process.

The module contains six sections: an Introduction, which briefly covers the background theory on which ensemble prediction is based; Generation, which describes how ensemble systems are constructed; Statistical Concepts, which gives a refresher on knowledge required for ensemble product interpretation; Summarizing Data, which describes common ensemble forecast products that consolidate the huge volumes of information provided by EPSs; Verification, which discusses how EPSs performance is assessed and documented; and finally, Case Applications, which provides links to a number of forecast cases illustrating the interpretation and use of EPSs in the forecast process.

In preparation for the winter season, there are four COMET training modules that are good candidates for local winter refresher training. Each of the modules takes approximately an hour to complete

The four modules are:

1. Dynamics and Microphysics of Cool-Season Orographic Storms: A good review of cloud physics and western U.S. mountain precipitation events (snow storms).

2. Low-Level Coastal Jets: A tutorial on low level jet theory and forecasting tips along the west coast.

3. Fog and Stratus Forecast Approaches: A good review of fog formation basics. The training module may be especially useful for offices that deal with persistent winter-time fog events.

4. Rip Currents: NWS Mission and Partnerships: A brief explanation of where NWSHQ will be evolving the program.

Learning Management System (LMS) E-learning Library Access: All Western Region employees now have access to the NETg and Free Course libraries in the DOC/NOAA/NWS LMS. Access to the libraries may be found at: http://e-learning.doc.gov/noaa/. If you have difficulty signing onto the site, please contact your SOO or DOH for the correct initial log-in and password. Employees will have access to these libraries through May 31, 2005.

SYSTEMS OPERATIONS DIVISION

UPS Updates: WFO San Diego was the latest office to have their UPS upgraded. An APC UPS was installed which has a number of monitoring features. Additionally, SOD plans to install Cell Watch (a battery monitoring system) on the Mitsubishi UPSs in the field.

Safety Report Reminder: Just a reminder that the Annual Safety Program Certification Report is fast approaching. The deadline for the report is January 21, 2005. One of the requirements is for everyone in your office to have completed safety training as per your Safety Focal Point.

AWIPS Update: 10 WR sites are now on OB4. Router replacement installs are now being scheduled. DX installs will begin in January. A list of sites will be sent soon. All sites should have the new DXs by the end of April 2005. You can go to the Western Region AWIPS web page for more info http://ww2.wrh.noaa.gov/sod/elec/awips05.htm.

ELI - Old Web Farm: All equipment integral to the operation of the old web farm has been removed from the ELI co-locate site, and all equipment integral to the operation of the old web farm located in the Regional Office has been powered down.